

2008 GOOSE STATUS

Canada geese that migrate to Missouri include birds from 4 different populations (Figure 8). The Tallgrass Prairie Population is comprised of small geese that have recently undergone a name change and are now referred to as cackling geese by the American Ornithologists' Union. Cackling geese nest in the high arctic and are much smaller than Canada geese that nest in Missouri. Most cackling geese that migrate through Missouri nest on Baffin Island and winter in Louisiana, Oklahoma, Texas and northeastern Mexico. Eastern Prairie Population (EPP) Canada geese nest in northern Manitoba along the Hudson Bay coast and migrates/winters through Manitoba, Minnesota, Iowa, and Missouri. The Mississippi Valley Population (MVP) nest further east along the Hudson Bay coast and primarily migrate/winter through Ontario, Wisconsin, Michigan, Indiana, and Illinois. Small numbers are harvested in Missouri, especially along the eastern portion of the state. Giant Canada geese nest in more temperate areas including Missouri. Geese from different populations survive, reproduce, and are harvested at different rates. The different populations are exposed to different breeding conditions each year. As a result, population-specific information is needed to assess annual status and to develop appropriate regulations recommendations.

Figure 8. Range of Canada goose populations.

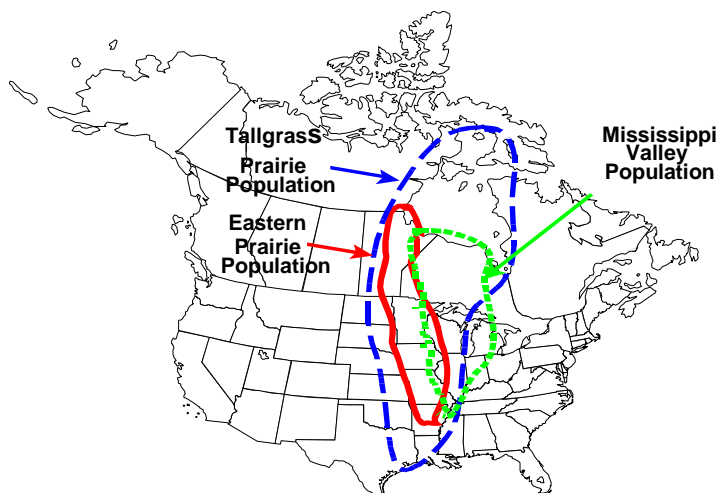
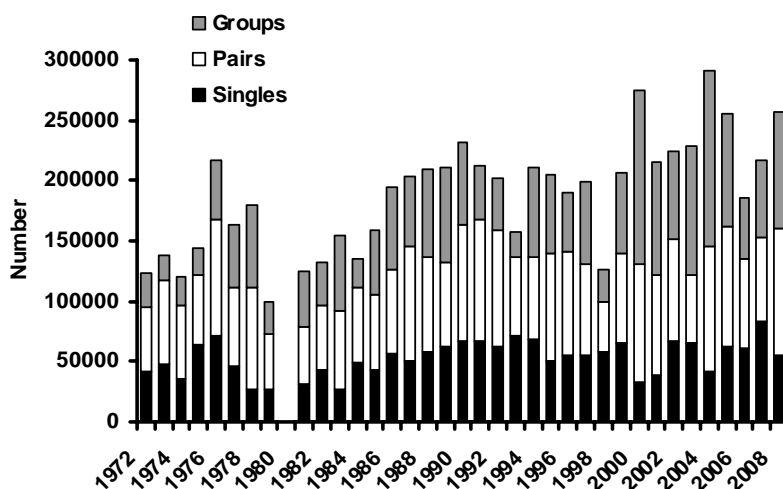


Figure 9. Numbers of EPP geese represented by singles, pairs, and groups.



Eastern Prairie Population:

Surveys of the EPP have been conducted since 1972 and reflect population and nesting effort (Figure 9). After three early to average springs, breeding phenology in 2008 was slightly later than average. Water levels in lakes and streams appeared slightly below average. The 2008 EPP estimate of 256,600 ±

33,600 was similar to the 2007 estimate of $217,500 \pm 22,900$ geese and the previous five year average of 235,500 geese. The estimate of geese represented by singles declined from the record estimate of $82,500 \pm 12,000$ in 2007 to $55,500 \pm 9,800$ in 2008, while the estimate of pairs increased from $70,900 \pm 11,400$ in 2007 to 105,600 in 2008. Since 1972, the estimate of pairs has exceeded 100,000 in only two other years, 1991 ($101,200 \pm 15,200$) and 2004 ($103,600 \pm 16,200$), both of which were characterized by very late springs and low productivity. The estimate of $95,500 \pm 28,200$ geese in groups was similar ($P=0.058$) to the 2007 estimate of $64,100 \pm 15,900$ and the five year average of $92,000 \pm 25,700$. The two-year average of 157,300 geese represented as singles and pairs is well above the two-year average minimum threshold of 75,000 that would warrant more restrictive regulations.

Mississippi Valley Population:

Spring 2008 was later than average on the MVP breeding grounds and poor recruitment is expected. The 2008 estimate of 305,190 breeding adults is 17% below the 1989-2007 average. However, the total spring population estimate of 626,358 was larger than 2007 (574,383). Timing of nesting was near average, but later than the past few years of earlier than normal nesting and nest densities were lower than observed during 2007. Production is expected to be poor, and the fall flight should be less than 2007 with fewer young in the fall flight.

Tallgrass Prairie Population:

Because the Tallgrass Prairie Population nest in the high arctic, production is often affected by weather and late snow melt. Summer field crews have not yet arrived on Baffin Island as of late July, but limited information suggests that spring breakup during 2008 was near average. Based upon this limited information, the fall flight may be similar to recent years.

Mississippi Giant Canada Goose Population:

Giant Canada geese are native to prairie portions of the Upper Midwest and were common in parts of Missouri during pre-settlement times. Giant Canada geese were thought to have become extinct by the late 1800s but have now been restored to most of the eastern United States.

Six states in the Mississippi Flyway developed and implemented a breeding population survey beginning in 1993. This survey requires the use of helicopters to conduct low level counts on randomly selected 2-square mile plots. Additional states cooperate in the survey using fixed wing aircraft, ground counts, or extrapolations from known density areas to habitats in non-surveyed areas. Numbers of giant Canada geese in the Mississippi Flyway doubled since coordinated surveys were initiated in 1993 (from 806,840 to 1.61 million in 2002), but appear to have leveled off in recent years. The spring 2008 estimate of 1.70 million is similar to the 2007 estimate (1.63 million).

Table 5. Spring population estimate of giant Canada geese in the Mississippi Flyway and Missouri.

Year	Mississippi Flyway	Missouri
1993	806,840	30,300 (\pm 18,000)
1994	1,002,950	35,050 (\pm 19,400)
1995	1,030,600	32,200 (\pm 14,200)
1996	1,132,354	38,870 (\pm 19,530)
1997	1,038,677	41,020 (\pm 22,860)
1998	1,214,798	44,825 (\pm 8,816)
1999	1,251,996	56,750 (\pm 10,987)
2000	1,511,904	77,128 (\pm 27,710)
2001	1,417,240	50,517 (\pm 14,934)
2002	1,612,349	64,222 (\pm 24,045)
2003	1,633,003	62,806 (\pm 19,519)
2004	1,600,673	65,172 (\pm 29,976)
2005	1,583,131	53,487 (\pm 21,985)
2006	1,729,630	64,593 (\pm 20,220)
2007	1,628,205	39,861 (\pm 14,630)
2008	1,700,531	69,031 (26,658)

Missouri Giant Canada Goose Population:

The Missouri Department of Conservation has conducted a statewide giant Canada goose spring each spring since 1993. The 2008 survey was conducted during 6 days between April 7-15, resulting in a giant Canada goose population estimate of 69,031 (\pm 26,658). The population estimate for Missouri increased from 30,300 during 1993 to a high of 77,128 during 2000 but appears to have leveled off since then. Production during spring 2008 appears about average in spite of record precipitation and widespread flooding throughout much of the state during the incubation and brood period.

White-Fronted Geese:

The Mid-Continent Population (MCP) of greater white-fronted geese nests across a broad region of the arctic from Alaska to the Foxe Basin. They stage in southern Saskatchewan and Alberta during migration and winter primarily in Texas, Louisiana, and Mexico. Mississippi and Central Flyway observers, in cooperation with the Canadian Wildlife Service and the U.S. Fish and Wildlife Service, conducted the 2007 fall survey of MCP white-fronted geese in Alberta and Saskatchewan during late September and estimated a population of 764,300 geese, similar to the 2006 estimate and the highest since 2000.

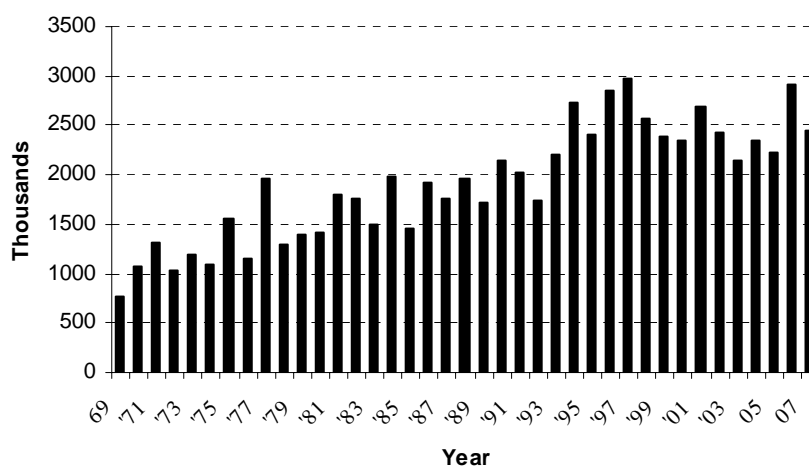
Observers reported near average weather conditions in most primary nesting areas of the central and eastern arctic during spring 2008. Nesting phenology in the Queen Maud Gulf area was normal and production is expected to be about average this spring. Production appeared to be somewhat variable in Alaska, with some areas reporting below average production, while reporters from the North Slope reported good production. Overall, production of MCP white-fronted geese in 2008 is expected to be better than 2007.

Light Geese:

The term light geese includes snow (blue and white color phase) and Ross's geese. The Mid-Continent Population (MCP) of light geese includes breeding colonies on Baffin and South Hampton Island and along the west coast of Hudson Bay. This population is the primary source of lesser snow geese present in Missouri during fall through winter. However, light geese from throughout the arctic are present especially during spring migration. Although lesser snow geese are more common, increasing numbers of Ross's geese have been noted in Missouri and the Mississippi Flyway in recent years. This appears to be due to higher numbers of Ross's geese throughout their range plus Ross's geese have expanded their breeding range into the eastern arctic. Slightly warmer than average (4-5° C) temperatures during early spring in the eastern arctic is expected to result in average to above average production in that area. Harsh weather and later than average nesting may affect production along portions of the west coast of Hudson Bay. Observers on South Hampton Island reported that nest initiation was about average, but as of late July, field crews were not yet present to confirm expected conditions. Based upon limited information, overall production of light geese is expected to be about average in 2008, but with a higher proportion of young in the fall flight compared to 2007.

The 2007-08 Midwinter Waterfowl Survey resulted in an estimate of 2.4 million MCP light geese, which is 16% fewer than the previous year (Figure 10). After peaking at nearly 3 million in 1998, numbers of the MCP light geese have been variable, but generally stable.

Figure 10. Midwinter survey estimates of the Mid-Continent Population of light geese: 1969-2008.



2008-09 WATERFOWL SEASON FRAMEWORKS

Broad frameworks of waterfowl hunting dates, season lengths, and bag limits are developed by the U.S. Fish and Wildlife Service in cooperation with states from each of the 4 flyways – Atlantic, Mississippi (including Missouri), Central, and Pacific. A series of technical meetings, administrative review, and public comment are documented in the Federal Register and provide a forum for biological and social considerations. The result of this regulations process is a general waterfowl season framework within which states select specific season dates. All states within each flyway share a common framework of season length and bag limits. Missouri's basic season